

Fig. 1: Bipolar and Unipolar Current Pulses

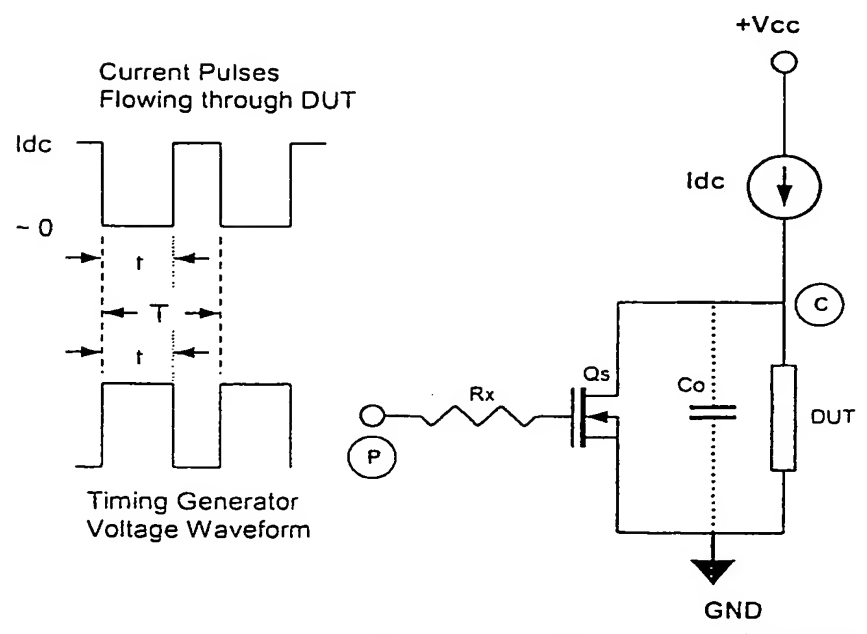


Fig. 2: Pulsed Current Generation (PRIOR ART)

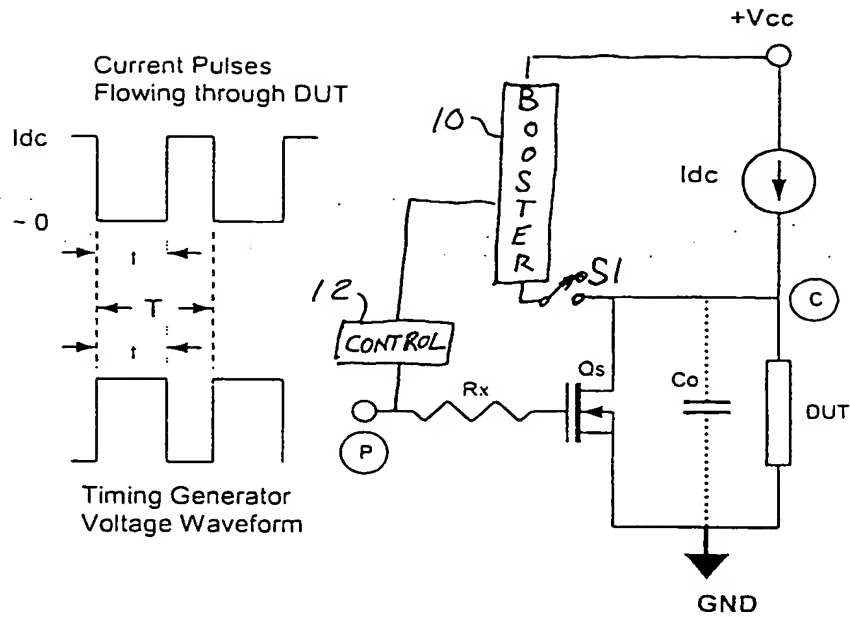


Fig. 3: Pulsed Current Generation

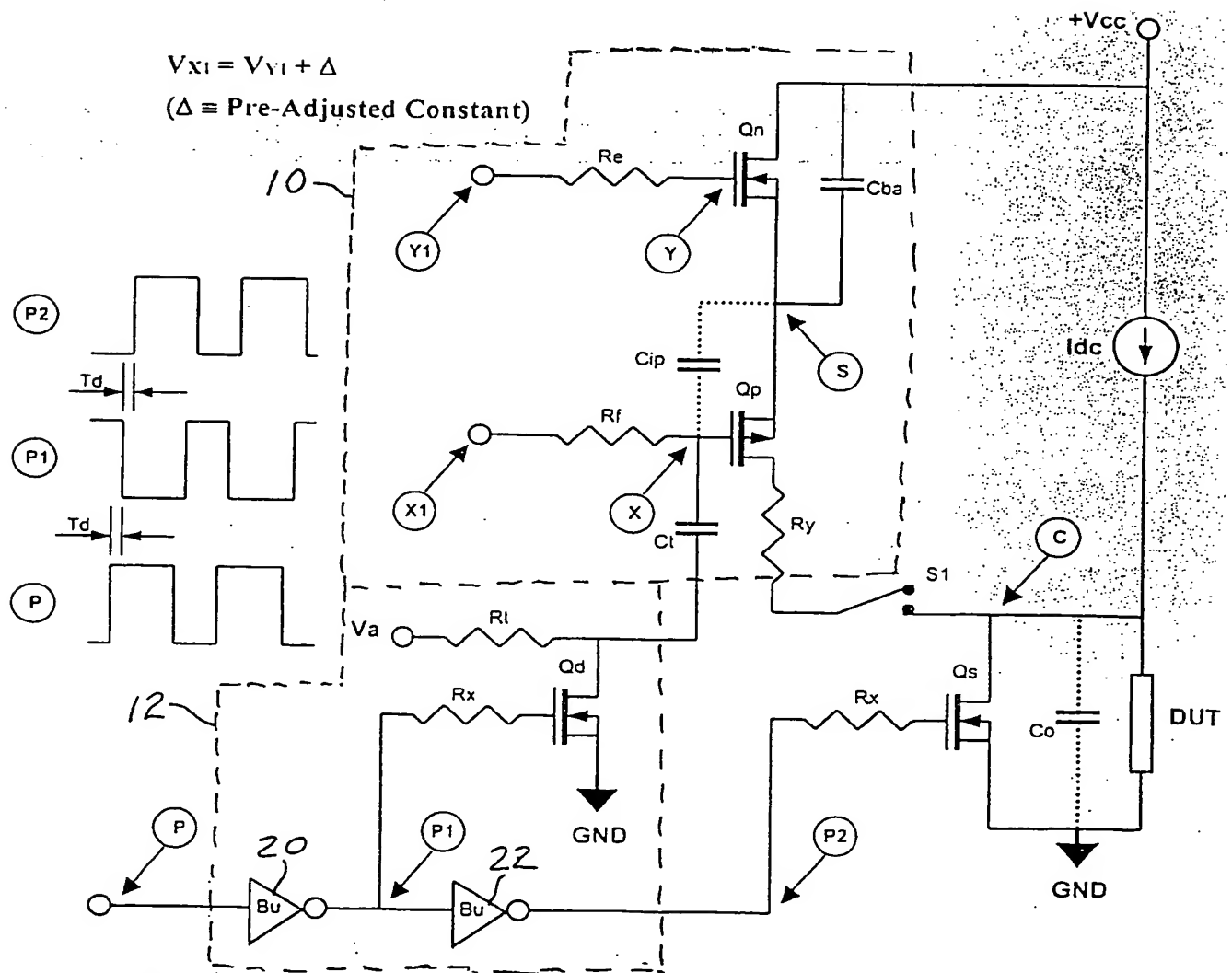


Fig. 4: Basic Booster Implementation with the Related Pulsed Current Source

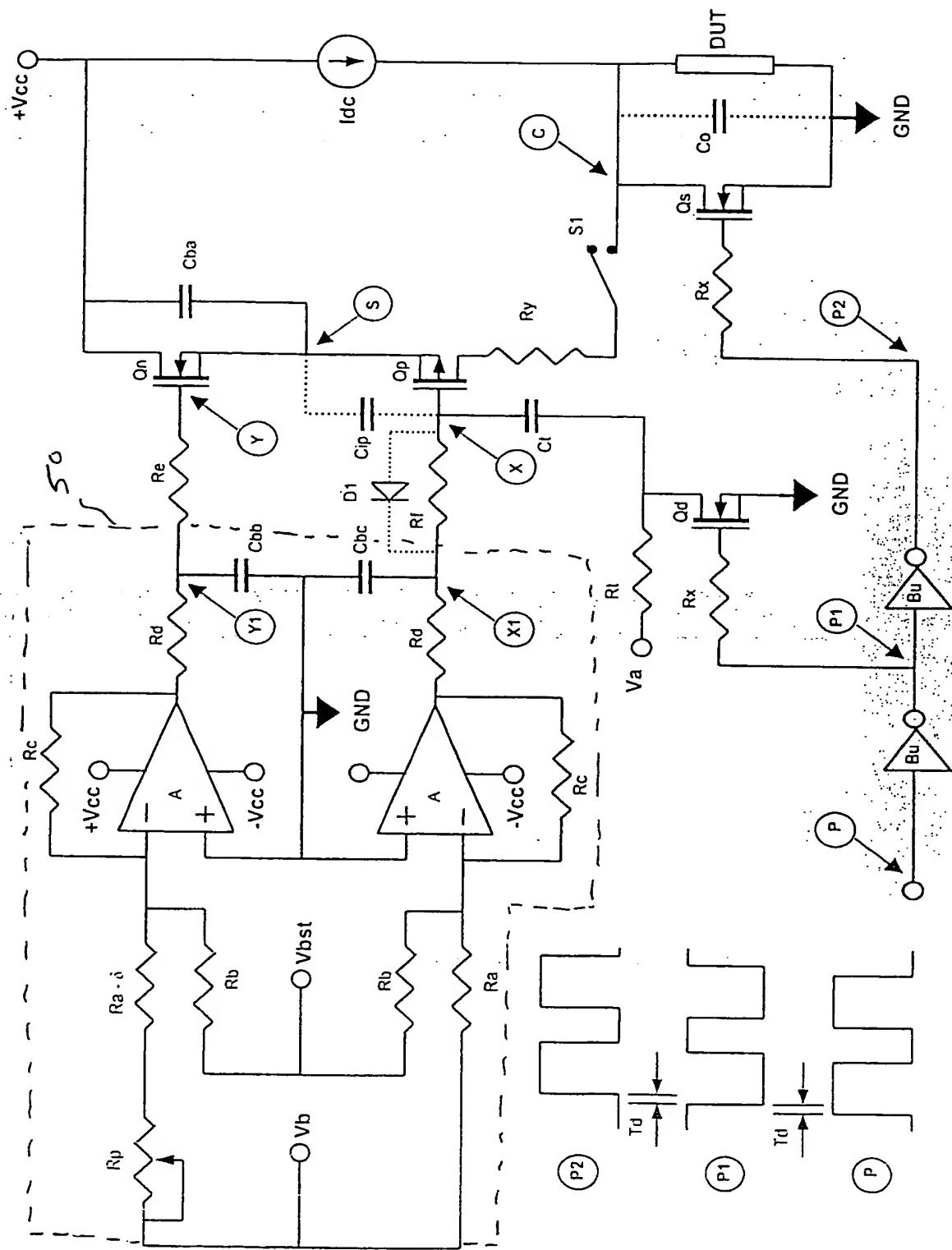
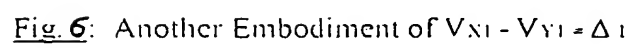


Fig. 5: Booster and Pulsed Current Source with One Embodiment of $V_{X1} = V_{Y1} + \Delta$



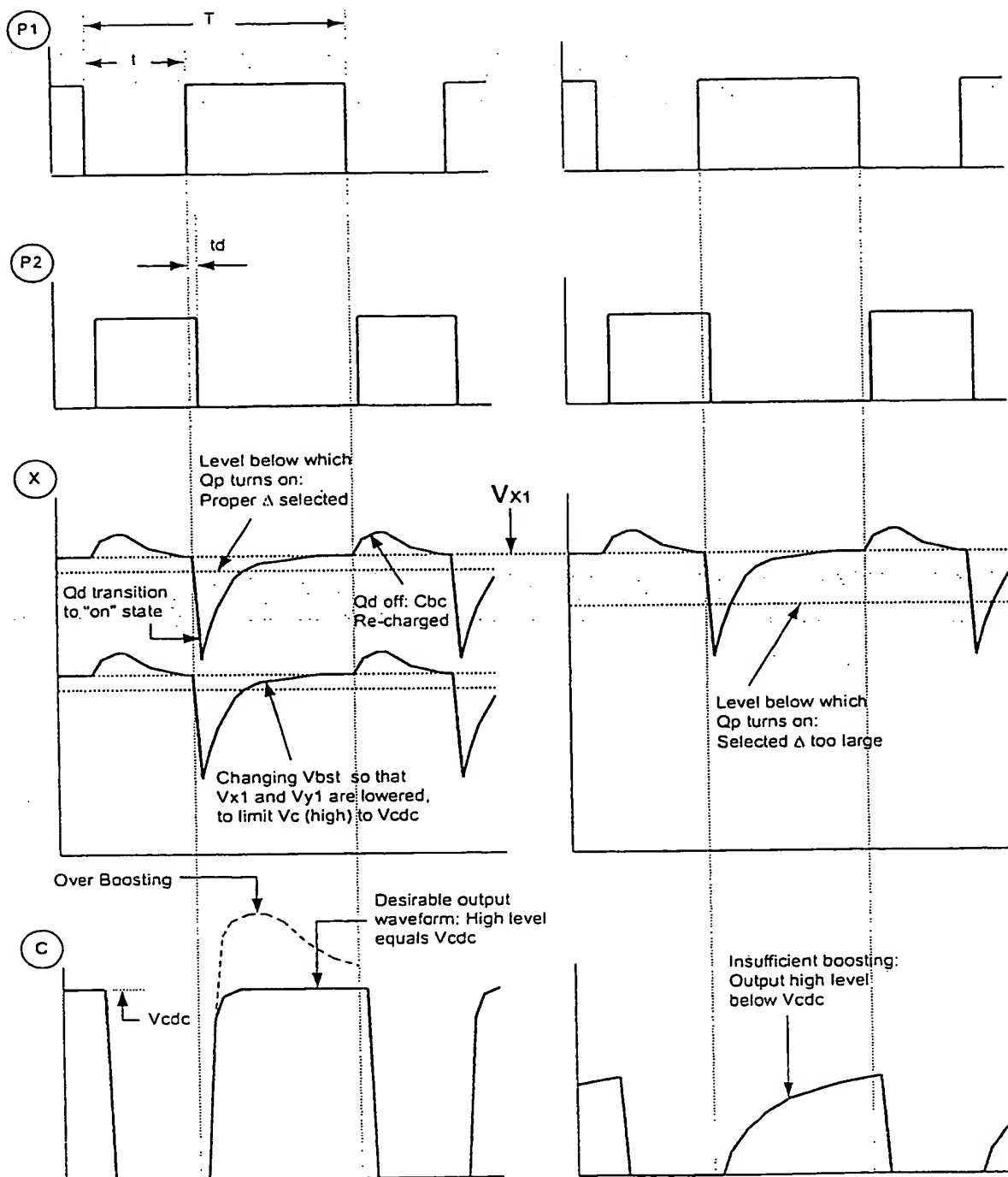


Fig. 7: Waveforms at points P1, P2, X and C (refer to Fig. 4). Left hand side shows proper setting of Δ ($V_{x1} - V_{y1}$), leading to the expected output waveform. The right hand side shows insufficient boosting and the resulting improper output waveform due to excessive magnitude of Δ .